

## Amendments to the Claims

1 (Currently Amended). A blood processing system comprising  
a ~~processing chamber filter~~ to ~~process~~ remove leukocytes from blood, and  
a fluid flow cassette separate from the filter and communicating with the  
~~processing chamber filter~~ comprising  
a body,  
a pump chamber formed entirely in the body,  
a flexible diaphragm on the pump chamber responsive to an applied  
fluid pressures for flexure toward and away from the pump chamber to pump fluid blood through the  
pump chamber,  
a valve formed entirely in the body in communication with the pump  
chamber,  
a flexible diaphragm on the valve response to fluid pressures for  
flexure to open and close the valve in concert with operation of the pump chamber,  
a flow path formed, at least in part, in the body, to couple the pump  
~~chamber valve~~ in fluid flow communication with the ~~processing chamber filter~~, to convey fluid blood  
pumped by the pump chamber into the ~~processing chamber filter~~, and  
an in line cavity formed in entirely within the body ~~and located in the~~  
~~flow path to trap air in blood conveyed in the body to prevent entry of air into the processing chamber.~~

2 (New). A system according to claim 1  
further including a blood filtration medium in the cavity.